

REMARKS

Reconsideration of the application is requested.

Claims 1-5 and 8-10 remain in the application. Claims 1-5 and 8-10 are subject to examination. Claims 1, 5 and 9 have been amended. Claims 6, 7, 8 and 11 have been/were previously canceled to facilitate prosecution of the instant application.

Under the heading "Claim Rejections - 35 USC § 101" on pages 2-3 of the above-identified Office Action, claim 1 is rejected as allegedly not directed to statutory subject matter. The Examiner states, and we agree, that the test is one of a "useful, concrete, and tangible result be accomplished". Claim 1 has been amended to change the word "identifying" to "verifying" the permissible entry address with the correlation data for authenticating the entry address in a computer program. This is believed to clearly describe a useful purpose and inherently requires a processor of some type. Support for changing the word "identifying" to "verifying" is found on page 4, lines 9-11 of the specification which recites an automatic check to determine whether the correlation data is satisfied when executing a function call.

Under the heading "Claim Rejections - 35 USC § 102" on pages 3-6 of the above-identified Office Action, claims 1-5 and 8-10 have been rejected as being fully anticipated by U.S. Patent No. 4,683,549 to Takaki (hereinafter Takaki) under 35 U.S.C. § 102.

Takaki describes a method to insert sequences of program code into a program, which makes use of an address table that contains the addresses of the start and end instructions of the inserted program. This involves some shifting of sequences of program instructions, which is recorded by inserting the corresponding addresses into the top address table. It is evident that the address table is used to refer directly to the initial addresses of the execution program sequences. The examiner refers generally to the abstract and Figs. 7 and 8 of Takaki without giving any explicit relevancy to the cited limitations of the claims of the instant application.

The specification of the instant application describes several variants of the inventive method, by which permissible entry addresses are checked or verified by reference to correlated data. The addresses of the correlated data are stored immediately before or after the address of the program entry. This does not mean the virtual

address of the program entry, which is stored in a table or list of permissible entry addresses, but the actual program instruction code at the position of the program that is designated by the entry address. At the position of the permissible entry address, but not within the program code stored at this address, the address of a correlated data is stored, which may simply contain the entry address again, where the program execution will then be continued. The correlated data are stored in especially reserved memory areas, like an address table, but with the difference that these data are referred to only as correlated data when the permissible program entry is addressed. It is not meant as a reference list of entry addresses. The jump to the entry address is verified as legal, if there is a correlation with the data the address of which is stored immediately before or after the program instruction at the entry address.

The correlation with program data can be provided in non-reserved memory areas, as it is described in the specification in connection with alternative embodiments. This solution presupposes an upper boundary of the number of bytes of each program instruction, in order to offer the possibility to have a correlation between code data items which are at least the maximal number of bytes away from one another. This guarantees that the correlation is not

verified within the same program instruction. Another way to state this is to say that the correlation is verified between code data items which are at least as many bytes away from one another as the maximum length of any individual program instruction.

According, it is respectfully stated that Takaki, does not read on the claims of the instant application. Nevertheless, some further clarifications of the claim language may support a clearer distinction between the invention of the instant application and Takaki.

The citation of the "permissible entry address" in claim 1 of the instant application refers to program code belonging to the entry address. The last paragraph has been amended to designate an actual entry address as opposed to an address item at a specified position in an address table. The paragraph now reads: "storing, in a memory cell, an address of a correlated data item one of directly before and directly after the program instruction at the permissible entry address."

This step would be of no use in the method of Takaki. Therefore, the amended claimed method for protecting entry addresses could not have been anticipated from Takaki.

Claim 2 specifies that the correlation is verified by reference to data entry in a protected list of legal entry addresses, where the address of the program entry is stored and thus confirmed as legal. This is not to be confused with the top address table of Takaki, which is regularly used as a reference to find the relevant program entry positions. Therefore, in Takaki, there is no correlation with data items stored at addresses that are stored directly before or after the program instruction at the permissible entry address.

Claim 5 has been amended with the features of original claim 8. Takaki is not believed to teach the use of code data items being at least n-bytes away from one another.

Claim 9 has been amended to be more sufficiently definite. Specifically, claim 9 has been amended to state that the specific byte sequence which cannot occur within a regular code is provided as the correlation of data as noted on pages 7 and 8 of the specification of the instant application. Takaki is not believed to teach the use of a specific byte sequence as the correlation data.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either

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show or suggest the features of claims 1, 5 or 9. Claims 1, 5 and 9 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1, 5 or 9.

In view of the foregoing, reconsideration and allowance of claims 1-5 and 9-10 are solicited.

If an extension of time is required, petition for extension is herewith made. Any extension fee associated therewith should be charged to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,



For Applicants

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